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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,815	01/18/2002	Phillip L. Wimmer	10012053-1	3187

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HEWETT-PACKARD COMPANY  
Intellectual Property Administration  
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Fort Collins, CO 80527-2400

EXAMINER
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FULLER, ERIC B

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/052,815

Applicant(s)

WIMMER ET AL.

Examiner

Eric B. Fuller

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 33-36 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-26 and 33-36 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

Applicant argues that the use of "initiator" in the claims is meant to mean "precursors of structures formed by the ablation process", as stated in the specification. This argument is not found convincing. The claims, as drafted, do not require this interpretation. Even though the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As the claims are presently drafted, the examiner maintains that "initiator" is open to read on the prior art of the previous Office Action and the rejections are maintained.

As to the arguments against inherency, as pertinent to claim 2, the claim reads on "permitting" the debris to resettle. Since the reference does not take active steps in removing the debris, this reads on "permitting". The claims fail to provide a positive recitation that the debris actually resettles on to the surface of the substrate and functions as a shadow mask because its laser absorption properties have been changed (charring, etc.). As the claims are presently drafted, the examiner maintains the rejections of the previous Office Action.

Applicant argues that Drazl teaches away from using a laser. This is not found convincing. Drazl teaches that UV lamps provide a large radiated area applicable for radiating large substrates in a small amount of time with little precision. Slysh teaches that UV lasers provide radiation in small areas applicable for radiating smaller

substrates with more precision, but takes more time. Therefore, the two references teach the trade-off between precision and time. One of ordinary skill would have the ability to determine which radiation source to use depending on allotted deposition time and precision desired. Therefore, these rejections have been maintained.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 10, 11, 18, 19, 21, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Slysh (US 5,147,680).

Slysh teaches to roughen a substrate by irradiating the surface with a laser in order to increase the adhesion of a layer to be applied (abstract). A mask may be used to control the areas on ablation (column 2, lines 15-30). Additionally, since some dependent claims are drawn to the initiator may being substrate material that has already been ablated and the art does not teach to blow the ablated material away from the substrate, this is inherent to the process.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-26 and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drazl et al. (US 6,565,927 B1) in view of Slysh (US 5,147,680).

Drazl teaches to pattern a substrate by irradiating the surface with UV light in order to increase the adhesion of a layer to be applied (column 3, lines 1-25). The water, ozone, organic particles taught in column 3, lines 28-45 reads on being the initiator. Additionally, since some dependent claims are drawn to the initiator may being substrate material that has already been ablated and the art does not teach to blow the ablated material away from the substrate, this is inherent to the process. The reference is silent to the optical energy being in the form of a laser.

However, Slysh teaches that a laser may be used to provide focused optical radiation for roughening a substrate with higher precision (column 2, lines 15-45). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use a laser to provide the optical radiation in the process taught by Drazl. By doing so, one would reap the benefits of increased precision.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B. Fuller whose telephone number is (571) 272-1420. The examiner can normally be reached on Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Meeks, can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



EBF



**TIMOTHY MEEKS**  
**SUPERVISORY PATENT EXAMINER**